



SITREP

THE JOURNAL OF THE ROYAL CANADIAN MILITARY INSTITUTE



—COMBAT CAMERA

Desert Dragon—an M777 howitzer of D Battery, 2nd Regiment, Royal Canadian Horse Artillery (2 RCHA) prepares to fire at the Canadian Forward Operating Base (FOB) at Sperwan Ghar, Afghanistan.

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From the Editor's Desk



We start the New Year with more loss of life in Afghanistan including the first member of the media. And a shift in tactics due to the campaign plan of the new overall commander in Afghanistan, U.S. General Stanley McCrystal that results more in protecting the citizens of Afghanistan than finding, fixing and killing the Taliban. This new approach is more a change to U.S. tactics than to that of Canada's as our mission always focused on protecting Afghans. However the addition of a U.S. battle group to the Canadian contingent hopefully will allow the occupation and securing of key villages and communities and a resultant rise in security. Heretofore this was problematic due to the small numbers of Canadian troops assigned to a large area of responsibility.

In the last issue it was suggested that the greatest challenge to Canada in the near future will be the national debt. The Army is finding economies in order to maintain the capital procurement program of replacement weapons systems and this has translated into a reduction in funding to the Reserves in the form of reduced frequency of parade nights per month and a reduction in Class B positions. This compounds the many challenges already facing our Reserve community.

Alex Roland contends: (1) technology, more than any other outside force, shapes warfare; and, conversely, war (not warfare) shapes technology. (2) Military technology is, however, not deterministic. Rather, (3) technology opens doors. And, finally, (4) these characteristics of military technology are easier to see in the modern period than previously, though they have always been at work.

Your Editor examines "When should an officer disobey orders?" in consideration of constraints on warfare, the responsibility of the state and the individual to include coercion and superior orders, democracy and conscience, and the precedent of Nuremberg.

Vincent Curtis writes that Maneuver Warfare exhibits all the worst characteristics that military theorizing has evinced in the last thirty years. Maneuver Warfare is in eclipse because of irrelevancy, and the Canadian Forces not long ago adopted Maneuver Warfare as its operational doctrine.

The Defence Studies Committee is always receptive to new members. If you wish to pursue defence and security issues in greater depth, consider joining us.

Sincerely,

Colonel (ret'd) Chris Corrigan
Editor and Chair Defence Studies Committee

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WAR AND TECHNOLOGY

by Alex Roland

Military technology often seems to be the dark side of innovation, the Mr. Hyde roaming the back alleys of civilization for opportunities to work his worst on society. Its foundational figure in Western civilization is the Greek Hephaestus (whose counterpart was the Roman Vulcan), the only god to have been lame and misshapen. But countless inventors and innovators, from Alfred Nobel to Robert Boyle, thought of weapons positively. They believed that they could banish the scourge of war, or at least restrain its excesses, if they could only invent the ultimate weapon, the instrument so horrible that no one would dare use it.

More than six decades into the nuclear age, there is growing evidence that the hydrogen bomb may prove to be the long-sought war-stopper.¹ But should that be the case, it will run counter to the sorry record of prior human civilization, when each new instrument of war contributed to the carnage without altering the human nature Thucydides believed to be at the heart of war. Melvin Kranzberg, a co-founder of the Society for the History of Technology and the founding editor of its journal, *Technology and Culture*, was fond of observing that technology is neither good nor bad, nor is it neutral. Technology in essence is a process of manipulating the material world for human purposes. Whether it does good or ill depends not on the technology itself but on what humans choose to do with it.

Military machines and instruments can nonetheless be understood using the same concepts and categories that scholars apply to technology in general. Below I put forward four propositions about military technology, but the principles at work could be applied as easily in any realm of technological endeavor. They sometimes have a special relevance or poignancy when applied to war, but they say more about the nature of technology than they do about the nature of war.

In addition to their heuristic value, these concepts also have pedagogical utility. They can help demystify the arcane and often secretive world of military research and development and also clarify the impact on society of all complex technological systems. They offer students a set of conceptual tools for thinking about change in warfare over time and the

role that technological innovation has played in that process.

My propositions are these: (1) technology, more than any other outside force, shapes warfare; and, conversely, war (not warfare) shapes technology. (2) Military technology is, however, not deterministic. Rather, (3) technology opens doors. And, finally, (4) these characteristics of military technology are easier to see in the modern period than previously, though they have always been at work.

Technology Shapes Warfare

Technology shapes warfare, not war. War is timeless and universal. It has afflicted virtually every state known to human history. Warfare is the conduct of war. It is the clash of arms or the maneuver of armed forces in the field. It entails what military professionals call operations, whether or not the opposing forces actually unleash their organized violence on one another. War is a condition in which a state might find itself; warfare is a physical activity conducted by armed forces in the context of war. Of course, many kinds of group violence, from gang fights to terrorism, might display some or all of the characteristics of warfare without rising to this definition of war, but more often than not these violent conflicts use instruments of war. To understand the technology of warfare is to understand the technology of most public violence. Wording is also important in articulating exactly what impact technology has on warfare. A number of verbs suggest themselves. Technology defines, governs, or circumscribes warfare. It sets the stage for warfare. It is the instrumentality of warfare. The most important verb describing the impact of technology on warfare is that it changes warfare. Technology has been the primary source of military innovation throughout history. It drives changes in warfare more than any other factor. Consider a simple thought experiment. Sun Tzu and Alexander the Great are brought back to life and assigned to lead coalition forces today in Afghanistan. These near contemporaries from the fourth century BCE would understand almost everything they would need to know. Alexander actually fought in Afghanistan, and Sun Tzu (if such a person really existed) fought in comparably mountainous terrain in China.² Both were masters of strategy and tactics. What came to be called the “principles of war” are simply the tacit knowledge that all successful commanders throughout history have carried around in their bank of experience: an

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understanding of intelligence, surprise, maneuver, command and control, concentration of force, unity of command, terrain, etc. Even Clausewitz's seminal contributions to military art and science—chance, violence, the “fog of war”, and “friction”—were concepts that Alexander and Sun Tzu knew by different names.

The only modern tool of command they would not know and could not readily assimilate would be the technology of war. Airplanes, missiles, tanks, drones, satellites, computers, GPS, and all the remaining panoply of the modern high-tech battlefield would be incomprehensible to them. A sergeant from their operations staff could exploit these resources more fully and effectively than either of our great captains. Sun Tzu and Alexander would be incompetent on the modern battlefield.

The point is even more obvious in humankind's other two fields of battle—the sea and the air—to say nothing of space, perhaps the battlefield of the future. Naval warfare does not occur without ships, which, through most of human history, were the most complex of human technological artifacts. Of course the same is true of planes for air warfare, missiles for strategic warfare, and spacecraft for star wars. In each case, the vehicle defines the warfare. Horatio Nelson, perhaps the greatest naval commander of all time, would have been powerless to understand the strategy and tactics of World War II's air warfare in the Pacific or submarine warfare in the Atlantic. The cat-and-mouse contest of Soviet and American attack submarines in the Cold War would have been even more incomprehensible to him. He might have gone back in time and intuited the essence of galley warfare, but he could not command in the age of steam, let alone the nuclear age, without a solid grounding in modern science and technology.

The more modern, or postmodern, the warfare becomes, the more the generalization holds true. Technology defines warfare. Air warfare was not even possible before the twentieth century, save for the vulnerable and inefficient reconnaissance balloons that were pioneered in Europe and America in the nineteenth century. In the twenty-first century, air warfare ranges from strategic bombing to close air support of ground troops to dog fights for air superiority to pilotless drones that carry the eyes and ears, and sometimes the ordnance, of operators hundreds, even thousands, of miles away. The U.S. boasts a missile defense installation that can stop the unstoppable, an intercontinental ballistic missile. Space-faring nations flirt with anti-satellite weapons launched from earth and even the prospect of space-based weapons to fight one another and threaten the earth below. Air warfare differs from naval warfare, not because the strategy and tactics of conflict in those realms differs, but because planes differ from ships. And, of course, both differ from tanks and rockets and satellites. Each technology shapes, defines, circumscribes, and governs a new kind of warfare.

Nor is it just the evolution of weaponry that changes warfare. It is the distribution of the weaponry. Throughout his-

tory, states have usually fought one another in weapons symmetry.³ In the first Gulf War, for example, Saddam Hussein attempted to defeat a conventional, industrialized, mechanized American army with a conventional, industrialized, mechanized Iraqi army. The quality and quantity of the American technology prevailed. In the second Gulf War, however, the insurgents resorted to asymmetrical warfare, fighting the high-tech American arsenal with low-tech instruments of assassination, sabotage, and terror. Only when the United States adjusted its technology to meet the new threat did the enemy tactics lose their edge. Of course training, morale, numbers, will, and politics also contributed to the outcome in Iraq, but the nature of the technology set the stage for the struggle.

Technology Does Not Determine Warfare

However much technology may change warfare, it never determines warfare —neither how it will be conducted nor how it will turn out. Technology presides in warfare, but it does not rule.

The whole notion of “technological determinism” is a red herring.⁴ Humans can always resist the historical forces surrounding them. To believe in determinism is to believe in inevitability. This begs the question, “Why”? What historical force or law pushes events to some inescapable outcome? In hindsight, events may appear predetermined or inevitable, but nothing in human activity can be predicted with certainty.

Think about the instances in history when technology appeared to determine the nature and even the result of warfare. Chariots were perhaps the most dominant instrument of warfare before nuclear weapons. Indeed, historian William H. McNeill has called them the superweapon of their day.⁵ When they appeared in the Levant in the eighteenth century BCE, they swept all before them. From Egypt to Mesopotamia, states either adopted chariots or ceased to compete in interstate war. The chariot craze bred an international chariot aristocracy, the Maryannu, who sold their services to the highest bidder.⁶ States built up enormous chariots corps with attendant supply and maintenance trains, culminating in the battle of Kadesh in 1275 BCE, when the contending Egyptian and Hittite forces committed an estimated 5,000 chariots to a cataclysmic but ultimately indecisive day of battle. Western warfare through most of the second millennium BCE was chariot warfare. The chariot defined, drove, governed, circumscribed ground warfare.

And then it was gone. Within a century after the Armageddon at Kadesh, the chariot disappeared as the dominant technology of Levantine warfare. Just as there is no sure evidence of where the chariot came from and why it ruled, so is its fall from dominance a mystery. Robert Drews notes that it lost power in “The Catastrophe”, the wave of wars, raids, and forced migrations that swept the eastern Mediterranean around 1200 BCE.⁷ William McNeill believes that the introduction of iron weapons at just this time gave infantry new power to stand up to chariots.⁸ Another possible explanation is

state bankruptcy brought on by the arms race in chariots and the horses to pull them. Still another is a change in infantry tactics, perhaps coupled with McNeill's iron weapons. In any case, the apparent determinism of the chariot evaporated.

Countless other examples through history of seemingly irresistible weapons leading to inevitable triumph have similarly risen and fallen in their turn, from gunpowder through the "Dreadnought revolution" and strategic bombing to the recent enthusiasm for the "revolution in military affairs", a technological superiority that was to have given the U.S. unassailable military prowess.

The Open Door

A better conceptual model for the technology of war is "the open door". This metaphor was introduced by medieval historian Lynn White, Jr., in his classic study *Medieval Technology and Social Change* (Oxford, 1962). Seeking to demonstrate that medieval society spawned its share of technological innovation, White presented a series of interrelated case studies. One revisited and refined the discredited claim by Heinrich Brunner that the appearance of the heavily armed and armored mounted knight on the battlefields of eighth-century Europe had bred feudalism. Brunner had imagined that Charles Martel first conceived the scheme of a feudal array and the social, political, and economic system to sustain it at or immediately following the battle of Poitiers in 732, when his posse of mounted warriors drove off Muslim raiders spilling into southern France from the Iberian Peninsula. But White showed that Martel had begun confiscating church property for distribution to a new class of mounted warriors before the battle of Poitiers. What, then, asked White, might have inspired Martel, if not his victory over the lightly armed and armored Muslim mounted warriors? White's answer was the stirrup, an Asian innovation just making its first appearance in Europe about the time of Poitiers. White imagined that this technology allowed the heavily armed and armored mounted knight to lean into his lance and overwhelm mounted and unmounted warriors alike with irresistible force.

White's argument was widely and roundly attacked, especially by Marxist historians. Most of his critics accused him of technological determinism, of arguing that the stirrup produced feudalism. But White had gone out of his way to avoid any such claim. He called the stirrup a "catalyst". It did not create feudalism out of whole cloth. Rather, when it was added to the complex soup of medieval society, feudalism precipitated out. Other societies with different ingredients and different chemistries would produce different residues. Technology does not determine outcomes, said White, it opens doors. People must decide if they want to pass through. The availability of the stirrup in Europe did not mean that Martel would adopt it to make the heavily armed and armored mounted knight the mainstay of an emergent military system.

The "open door" is a powerful conceptual tool for thinking about all technology, especially military technology. It adds what most accounts of technological innovation lack:

human agency. Humans must decide if they are going to, or can, take up a given military innovation. And they must adapt it to their circumstances. Technology is a possibility, not an imperative. The varieties of technology—think, for example, of the different models of automobiles in the world—testify to the countless contexts in which people will apply the same fundamental innovation with differing results.⁹ In the years between the world wars, for example, the U.S. and Britain, geographically isolated from continental Europe, developed strategic bombers with which to project their military power, while the major continental powers concentrated on fighter aircraft to contend with each other for air superiority over the battlefields in their back yards.

What White did not discern was that human agency intervenes not once, but twice, at the moment of innovation. When discovering who chooses to walk through a door opened by technological innovation, it is equally important to understand who opened it for them. People invent and innovate. People open the door. Often there is a relationship between those who open the door and those who pass through it. In modern military experience we often think of that relationship as the military-industrial complex. This byproduct of the Cold War reminds us that the door can be swinging, even revolving. People who are anxious to pass through may hire agents to open the door for them. Likewise, those who figure out how to open doors may entice others to pass through. None of this makes the technology itself deterministic, but it can make the social system attending the door self-replicating and self-sustaining. In time, the participants may pass into realms that they would not otherwise have chosen to enter and that do not serve their interests.¹⁰ The reasons for their decisions, even the bad ones, however, lie not in the technology but in the personal, political, economic—in sum, contextual—forces already at work. The catalyst precipitates the consequences dictated by the ingredients and the chemistry. This raises my fourth point:

Modern Military Technology Is Different

Modern military technology is not different in kind, but in degree. World War II was the first war in history in which the weapons in use at the end of the war differed significantly from those employed at the outset. The atomic bomb is the most obvious example, but the list of military technologies introduced between 1939 and 1945 includes as well jet aircraft, guided missiles, microwave radar, and the proximity fuse, to name just a few. Some military leaders concluded from this experience that industrial production had won the world wars but military innovation would win the next war. Especially in the U.S., the military establishment began to institutionalize research and development, adopting from industry a kind of planned obsolescence that would keep American armed forces a generation ahead of their potential foes. They created what President Dwight Eisenhower called in his farewell address a "military-industrial complex", a perpetual arms race, not

necessarily with any particular enemy, but with the *status quo*.

The introduction of systematic, institutionalized innovation makes modern military technology seem radically different from all that went before.¹¹ That difference is simultaneously real and illusory. The reality stems from the accelerated pace of technological change in the modern world and an unprecedented mastery of energy and materials ranging across a dimensional scale from nanotechnology to floating cities like the modern aircraft carrier. The illusion arises from our growing inability to think of war in non-material terms. Modern commanders can hardly imagine how their predecessors thought about science and technology. A career officer in today's armed forces expects the arsenal at his or her disposal to change constantly over the course of a career. Before the second half of the twentieth century, however, commanders fully expected to retire with the same instruments they took up in their apprenticeship. Personal arms might even pass from father to son. Some innovation intruded on this static picture in the late nineteenth and early twentieth century, but nothing like the sustained hothouse environment of today's military arsenals.

Even the terms “science” and “technology” are modern, both coined in the nineteenth century. Before these conceptual categories took hold of the modern consciousness, premodern commanders thought of their armies and navies in terms of men (human capital) and material (arms and armor, forts and roads, food and ammunition). Improvements in any of these areas were made not by scientists and engineers, but by craftsmen with little formal schooling. “Engineers” in the premodern world were individuals who built and operated “engines” of war, i.e., *ballistae* and catapults. There was high-quality steel long before its composition was revealed by crystallography in the 1920s, but it was produced by artisans who passed their techniques from generation to generation through apprenticeship, not by industrialists whose staffs of scientists prescribed formulas that would produce steel of requisite characteristics. A handful of pre-modern geniuses, such as Michelangelo and Leonardo da Vinci, mastered art and engineering to imagine weapons that were centuries ahead of their time. Mechanics operated machines of war. Sailors were always mechanics operating the most complex machines of their age, be it the galley of classical Mediterranean warfare or the fully-rigged, side-gunned sailing ship of the line in the early modern world. Architects designed and erected fortifications, probably the most influential military technology before gunpowder. These marvels of what we would now call civil engineering—the Great Wall of China, the walls of Constantinople, the Roman *limes*—shaped countless conflicts throughout history and sometimes ensured that conflicts never happened. Other premodern builders oversaw civil works with equally important military implications, such as the Roman road network, or Caesar's bridge across the Rhine, or the earthen ramp at Masada.

The material resources that these premodern materialists delivered to their armies and navies were not seen as the result of abstract enterprises like science and technology. The producers of these wonders were simply practicing what Lewis Mumford called “technics”, from the Greek *techne*.¹² It is related to *episteme* in something like the relationship between modern technology and science. One was about doing, the other about knowing. One was learned in apprenticeship, the other was gained by the study of knowledge accumulated in a canon. But just as modern technology is more complex and independent than “applied science”, so is technics more subtle than simply craft knowledge. It is perhaps more helpful to think of premodern producers of military instruments as “improvers”, the generic term that Robert Friedel applies to all those people in the last millennium of Western history who have manipulated the material world in search of better ways to do whatever it is that people choose to do.¹³ In short, the tools of war have been evolving slowly throughout the course of human history, but only in the modern world has there been an institutionalized and rationalized mechanism for continuously and systematically innovating military technology. Some tantalizing hints from the ancient and classical world place our modern world in bold relief. One anonymous author from classical Greece offered the opinion that the only real utility for third-order equations was to compute the trajectory of *ballistae*.¹⁴ In this instance, at least, military technology really was applied science. Dionysius I, tyrant of Syracuse in the early fourth century BCE, recruited knowers and doers from around the Mediterranean to work in his arsenal to develop new machines of war, perhaps the first instance of a research and development laboratory.¹⁵ A Syrian engineer by the name of Kallinikos delivered “Greek fire” to the Byzantines in hopes that they would use it to defeat the Muslims.¹⁶ The Byzantines made of this the only truly secret weapon of the ancient and medieval world. “Secret weapons” as we now think of them were an invention of early modern Europe.¹⁷

Kallinikos provides a fitting ending for this account. When he is mentioned at all in history books, he usually appears as a kind of *deus ex machina*, an unknown and unknowable historical actor who delivers a war-changing weapon that in turns changes the course of history. Such representations give rise to the belief that “technological determinism” is at work. But in all such instances, it is well to think of a door. Who opened it and who passed through? Who was Kallinikos? How did he come by this formula, and why did he offer it to the Byzantines? Why did the Byzantines take up his new weapon? And why did they treat it as a state secret? “Technological determinism” is a distraction, a rhetorical device that diverts attention from the real historical questions that surround the relationship between war and technology. That relationship is defining, subtle, and evolving. Now, more than ever, it drives innovation in warfare. ❀

The views expressed are those of the author and do not

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Notes

- 1 John Lewis Gaddis, *The Long Peace: Inquiries into the History of the Cold War* (New York: Oxford University Press, 1987).
- 2 On the historicity of Sun Tzu, see Sunzi, Ralph Sawyer, and Mei-ch-n Sawyer, *The Art of War* (Boulder: Westview Press, 1994).
- 3 Robert O'Connell, *Of Arms and Men: A History of War, Weapons, and Aggression* (New York: Oxford University Press, 1989), 8-9 et passim.
- 4 Alex Roland, "Was the Nuclear Arms Race Deterministic?" paper prepared for the 50th Anniversary Workshop of the Society for the History of Technology, Washington, DC, 18 Oct. 2007.
- 5 William H. McNeill, *The Rise of the West: A History of the Human Community* (Chicago: University of Chicago Press, 1991), 104-106
- 6 See Arthur Cotterell, *Chariot: The Astounding Rise and Fall of the World's First War Machine* (London: Pimlico, 2004), 67-68, 86; R. T. O'Calligan, "New Light on the Maryannu as 'Chariot Warrior,'" *Jahrbuch für kleinasiatische Forschung* 1 (1950-51): 309-24
- 7 Robert Drews, *The End of the Bronze Age: Changes in Warfare and the Catastrophe CA. 1200 B.C.* (Princeton University Press, 1993), 209-14, and

passim.

- 8 McNeill, *Rise of the West*, 117-18
- 9 George Basalla, *The Evolution of Technology* (New York: Cambridge University Press, 1988).
- 10 Donald A. MacKenzie, *Inventing Accuracy: A Historical Sociology of Nuclear Missile Guidance* (Cambridge, MA: MIT Press, 1990).
- 11 And not just military technology. As Alfred North Whitehead observed many years ago, "the greatest invention of the nineteenth century was the invention of the means of invention." Alfred North Whitehead, *Science and the Modern World* (New York: Free Press, [1925] 1953), 96
- 12 Lewis Mumford, *Technics and Civilization* (1932).
- 13 Robert Friedel, *A Culture of Improvement: Technology and the Western Millennium* (Cambridge, MA: MIT Press, 2007)
- 14 J. G. Landels, *Engineering in the Ancient World* (Berkeley: University of California Press, 99-132).
- 15 Brian Caven, *Dionysius: War-lord of Sicily* (New Haven: Yale University Press, 1990), 90-97
- 16 J. Haldon and M. Byrne, "A Possible Solution to the Problem of Greek Fire," *Byzantinische Zeitschrift* 70 (1977): 91-99.
- 17 Pamela Long and Alex Roland, "Military Secrecy in Antiquity and Early Medieval Europe: A Critical Reassessment," *History of Technology* 11 (1994): 259-90.

WHEN SHOULD AN OFFICER DISOBEY ORDERS?

by Chris Corrigan

He who uses force unsparingly, without reference to the bloodshed involved, must obtain a superiority if his adversary uses less vigour in its application...From the social conditions both of States in themselves and in their relations to each other... War arises and by it War is...controlled and modified. But these things do not belong to war itself, they are only given conditions; and to introduce into the philosophy of War itself a principle of moderation would be an absurdity.

In the preceding quotation, Clausewitz recognized that war is a continuation of politics taking place in the community of nations and as "that society embodied certain expectations which are in part enshrined in public international law and these expectations determine the 'given conditions'...of armed conflict."¹ It is in the evolution of the phenomenon of the 'principle of moderation', and in the development of Just War Theory that the answer to the question 'when should an officer disobey orders?' be determined. From the perspective of a former military officer and soldier at the beginning of the twenty-first century, the answer appears relatively simple – 'when the orders are illegal or are morally wrong'. The answer becomes more problematic if the question is reworded. If 'should' is replaced with 'could' and 'would' respectively, two additional answers could be 'when the officer knows of a better way or method to achieve mission accomplishment' and 'when the officer knows the order entails greater risk and higher loss of life including his own'. However this article will be limited to the existing question as it applies to the conduct of war.

Col Chris Corrigan is the Executive Director of RCMI, a sessional professor in National Security and International Affairs for the Royal Military College of Canada and a former commander of Land Forces Central Area and Task Force Bosnia-Herzegovina.

The legality of orders is measured against positive laws, those laws of international society prescribing the just conduct of war. The morality of the orders is measured against the prevailing moral laws of society. Development in the law of war has incorporated some of this moral dimension. During the sixteenth and seventeenth centuries the dominance of religion waned with the growth of the nation state and the attendant secularisation of the legality of warfare. "The natural law-motivated theories of Aquinas and Grotius eventually gave way to the positivistic notions that with the emergence of sovereign states there arose a new order in a period of 'political absolutism', which was not based on improvable moral ideas but instead was based on a scientific description of the norms adopted by states through practice."²

For prior generations of officers and soldiers the answer was less clear. Succeeding generations have benefited from the evolution and development of international law and constraints on the waging of war. My aim is to examine the answer in consideration of constraints on warfare, the responsibility of the state and the individual to include coercion and superior orders, democracy and conscience, and the precedent of Nuremberg.

Constraints on Warfare

Just War Theory has evolved over the centuries and defines crime in war in the context of the moral reality of why wars exist; jus *ad bellum* (the right to go to war/just recourse to war, and how they are conducted) and jus *in bello* (just conduct in war). The principles of just war for jus *ad bellum* are just cause, legitimate authority, just intentions, public declaration of causes and intents, proportionality (more good than evil results), last resort and reasonable hope of success. For jus *in bello* the principles are discrimination (non-combatant immunity) and proportionality in the amount and

type of force used.³ These constraints on warfare found origin in the influence of the Catholic Church during the Middle Ages and the Renaissance. Later in the 1600's and 1700's Hugo Grotius and Emerich de Vattel further developed the Theory. Grotius wrote *De jure belli ac pacis* (Concerning the Laws of War and Peace) during the Thirty-Years War (1616-1648) in an effort to limit or control the violence and suffering caused by war. Later in the 1800's European public opinion demanded specific rules on the conduct of fighting and the treatment of "those at the mercy of either side in a war".⁴

These two inter-related aspects of the law of war developed as the law of The Hague concerning the just conduct of war and the law of Geneva for the treatment of war victims including prisoners of war and civilians. The Red Cross was formed and its purview grew to include treating the wounded and improving the conditions of prisoners of war. In 1864 a number of Geneva Conventions were widely accepted. The Hague Conventions of 1899 and 1907 further advanced the rules of war on land and sea, limited specific types of weapons, and defined what constituted the opening of hostilities and the rights of neutrals. By 1914 a consensus had been reached on the rules of war, yet no means existed to enforce the rules and punish the guilty as no international courts had been established. The only mechanism then available was for nations to prosecute those that committed crimes within their country or for the country to attempt to compel the accuser's country to prosecute them. These procedures did not result in justice being served by the German court at the 1922 Leipzig Trial of German First World War military and civilian leaders. The Pact of Paris (Kellog-Briand Pact), signed by sixty-three nations in 1928, set an innovative precedent that was to be used later during the Nuremberg International Military Tribunal (IMT). The Pact made aggressive war a crime and an unacceptable means of settling disputes between nations.

Early in the Second World War the Allies became aware of Nazi war crimes. "Was it enough after this war to fall back once again on leaving each country to try its own criminals and as many of the enemy's as could be caught? How scrupulous would these countries be when trying those who had conquered and occupied them? As after 1918, many felt that revenge was not enough; that the impulse must be channelled and controlled by international action."⁵ On 13 January 1942, at St James's in London, representatives of the nine occupied countries signed the St James's Declaration to address these issues. It was resolved that the international community would set itself above revenge and serve the higher purpose of justice by punishing those proven guilty of war crimes. To avoid a repetition of the Leipzig Trials where German leaders successfully avoided punishment, the Declaration stressed the need to try the leaders that ordered the war crimes. On the basis of this consensus, the United Nations War Crimes Commission, UNWCC, was formed in London in 1943 to develop the procedures and organization, and collect the evidence and compile a list of war crime suspects that would be necessary in order to expedite the war crimes trial anticipated upon cessation of hostilities. Since the Second World War, a plethora of conventions and treaties evolved governing a wide range of issues from genocide, human rights, the

High Seas, and the unlawful seizure of aircraft to the more notable 1949 Geneva Conventions of Wounded and Sick in Land and Sea Warfare, Prisoners of War, Protection of Civilians and the 1977 Protocol I to the 1949 Geneva Conventions on International Armed Conflicts. The laws of The Hague and Geneva were joined in the 1970's by those being formulated by the United Nations in New York pertaining to the protection of human rights in armed conflict.

Responsibility

Examining responsibility in Just War Theory entails a relationship between the individual and the state. Michael Walzer writes of 'Two Sorts of Rules' concerning soldiers having 'an equal right to kill'. The first is not a moral issue and deals with when and how, and the second is a moral issue and concerns whom they can kill. Of the 'Moral Equality of Soldiers' he writes, "among soldiers who choose to fight, restraints of various sorts arise easily and, one might say, naturally, the product of mutual respect and recognition". Honour and chivalry have been lost in modern combat due to democratic revolution and revolutionary war. Individuals have the right to life and liberty. The individual soldier's right to life and self-defence is related to a state's right to defend itself.

*Over a long period of time, shared experiences and cooperative activity of many different kinds shape a common life. 'Contract' is a metaphor for a process of association and mutuality, the ongoing character of which the state claims to protect against external encroachment. The protection extends not only to the lives and liberties of individuals but also to their shared life and liberty, the independent community they have made, for which individuals are sometimes sacrificed...Given a genuine 'contract', it makes sense to say that territorial integrity and political sovereignty can be defended in exactly the same way as individual life and liberty...It might also be said that a people can defend its country in the same way as men and women can defend their homes, for the country is collectively as the homes are privately owned.*⁶

W.V. O'Brien writes of two principles of state responsibility that may connect to individual command responsibility. "The first principle is that there is an international standard of belligerent behaviour, and that failure to meet this standard is a violation of international law." Later he writes, "the second principle of state responsibility that may be applied to individuals is that the degree of responsibility is related to the extent to which behaviour reflects official policies and acts of state." Individual responsibility will be measured in consideration of "the office and/or role of the individual and the extent of his consent to or acquiescence in the policies and his freedom of choice in the decision process." Hugo Grotius writes of command and individual responsibility, "Generals are responsible for the things which have been done while they were in command; and all the soldiers that have participated in some common act...are responsible for the total damage."

Establishing individual or collective responsibility for the conduct of a war crime and the relationship to an illegal or immoral order is complicated by the instinctive propensity for all soldiers to obey orders. Soldiers and officers understand the necessity to obey orders without hesitation for their own good and the greater good

and mission accomplishment of the unit. This greater loyalty to the unit and emphasis on mission success has frequently occurred at the expense of strict adherence to the laws of war.

Paul Christopher offers suggestions to guide soldiers and commanders in obedience to orders. The first is that “soldiers have a legal duty always to obey the lawful orders of their superiors.” It was only during the Second World War that some unanimity was reached concerning superior orders as defence in war crime trials. The 1749 English Military Code stated that only lawful orders had to be obeyed. During the First World War British and American “army manuals...absolved from culpability those who violated the laws of war under orders from their superiors.” During the Second World War the British and the Americans adopted parts of Article 47 of the 1872 German Military Code. In it a subordinate was “liable to punishment as an accomplice if he knew that the order involved an act the commission of which constituted a civil or military crime or offence.” Christopher adds that the Geneva and Hague Conventions do not address the issue of superior orders. However, the Charter of the International Military Tribunal does.

*Article Eight of the Charter which made clear that no defendant could claim the protection of having obeyed orders from a superior; though superior orders might be considered by the Tribunal as a mitigating factor in sentencing. The denial or defence of superior orders has often been called the ‘Nuremberg Principle’.*⁷

For a soldier to obey lawful orders, firstly he must recognize that his instinct may be to place greater emphasis on obeying orders rather than on principles of *jus in bello*, and secondly he must know the laws of war in order to judge what constitutes lawful orders. Some laws of war lack the clarity sufficient for a soldier to make judgement.

*For example, international law permits reprisals against the enemy as a legitimate means of responding to violations of jus in bello, when other efforts to curb criminal actions fail...one side can legally violate many of the rules of war in response to enemy violations. This means that soldiers may be legally ordered to commit acts that would otherwise be war crimes as reprisals.*⁸

Having addressed soldiers and their legal duty, let us examine their moral duty to always obey the lawful orders of their superiors. Aristotle and Aquinas hold individuals responsible for actions unless ignorance or duress mitigate. Hitler’s Commissar Order and Commando Order are two examples of immoral orders. The Commissar Order of 6 June 1941 ordered denial of the protection afforded prisoner of war status to Soviet Political Commissars and ordered severe treatment upon capture and summary execution. The Commando Order of 18 October 1942 ordered that any enemy on commando missions be ‘slaughtered to the last man’. Hitler also stated “I will hold responsible under military law, for failing to carry out this order, all commanders and officers who either have neglected their duty of instructing the troops about this order, or acted against this order where it was to be executed.”⁹ Soldiers have a moral duty to disobey lawful immoral orders that contravene just conduct in war principles and orders that are not a military necessity. Rommel recognized this and burned the Commando Order.¹⁰ The Nuremberg Trial set the precedent of morality

overriding legality with respect to obedience.

*The International Tribunal...ruled that the very essence of the Nuremberg Charter is that ‘individuals have international duties which transcend the national obligations of obedience imposed by the individual state. He who violates the laws of war cannot obtain immunity while acting in pursuance of the authority of the state, if the state in authorizing action moves outside its competence under international law’*¹¹

What of the moral and legal responsibility of Commanders for the actions of their soldiers? Commanders are morally and legally responsible for any actions performed in accordance with their orders. An example of this is the trial of General Yamashita. In December 1945, Japanese General Yamashita was found guilty of failing to prevent the illegal actions of his subordinates, crimes against Americans in the Philippines, despite not knowing of them. “Because the acts were so conspicuous and widespread, the court believed that he should have known about them.”¹²

*Following Grotius’s argument that one cannot claim ignorance of widespread crimes, the Canadian War Crimes Regulations state: “where there is evidence that more than one war crime has been committed by members of a formation...the court may receive that evidence as prima facie evidence of responsibility of the commander for those crimes.”*¹³

The Yamashita case set the precedent for the commander’s responsibility for his subordinates’ actions.

Democracy and Conscience

Elizabeth Anscombe argues that the coercive power of governments contributes to the public good. “For society is essential to human good; and society without coercive power is generally impossible.” The interplay between the individual soldier’s right to follow his conscience and his duty to serve society continues as an historical constant. Christianity and the issue of taking human life are key to the argument. “There is a current conception of Christianity as having revealed that the defeat of evil must always be by pure love without coercion.”

The plea of self-defence (or the defence of someone else) made by a private man who has killed someone else must in conscience—even if not in law—be a plea that the death of the other was not intended, but was a side effect of the measures taken to ward off the attack.

The concepts of turning the other cheek and offering no resistance to evil pervade the New Testament. Anscombe adds a “Centurion was the first Gentile to be baptized; there is no suggestion in the New Testament that soldiering was regarded as incompatible with Christianity.” A key element of Christian belief is that the taking of innocent life is forbidden. The evolution of just conduct in war caters for this by discriminating between fighting enemy combatants and the immunity of non-combatants. A just war of self-defence requires identifying those who are attempting to destroy you. The difficulty comes in identifying the true combatants from the near-combatants, those that are supporting the combatants. Donald Davidson writes:

The difficulty of differentiating between combatants and non-combatants has escalated with each stage in the development of modern warfare; the advent of conscript armies and large standing armies in Napoleon's era, new weaponry developed in the industrial revolution, the mobilization of whole societies in major wars, the large-scale employment of guerrilla or insurgency war and terrorism and the invention of weapons of mass destruction...Among civilians, those who make war decisions or produce war materials are generally considered as direct contributors to the war effort and, thus are combatants. Those who perform services or produce goods necessary for living are non-combatants, even though their service or goods may be used by military personnel. This line of reasoning for example, allows bombardment of munitions factories, but not catteries.

The soldier's Christian conscience can be assuaged by the principle of discrimination yet the principle of killing in self-defence can be rationalized only if death was not intended and was a side effect. The just conduct in war principle of proportionality (the amount and type of force used is proportionate to achieve objectives) can provide some further solace to the soldier's conscience.

The Precedent of Nuremberg

The Nuremberg Trial (IMT) lasted from 20 November 1945 to 30 September 1946 during which time 22 Nazi leaders and five organizations: the Gestapo-secret state police, the SS-police intelligence and military units, the SA-private army of the Nazi Party, the Reich Cabinet, and the General Staff and High Command were tried for crimes against humanity. The over-riding imperative of the IMT was to see that justice was done. John and Ann Tusa write of Robert Jackson, the Chief US Prosecutor, who stressed the need to not just try the 'little people' but to "reach men who possess themselves of great power and make deliberate and concerted use of it to set in motion evils which leave no home in the world untouched."

Ann and John Tusa cite the following prerequisites to another future Nuremberg. Firstly, the accused must be present during the trial. Trying in absentia 'although satisfying' will not lead to a proper solution. Secondly, the trial must be based on solid evidence. The IMT was fortunate that the Nazi process of recording the Thousand Year Reich was very thorough. And thirdly, the procedures and the conduct of the court and trial must be above reproach in impartiality, patience, and maintenance of dignity and judicial propriety.

On May 25, 1993, the United Nations Security Council formally set up a War Crimes Tribunal-the first since the International Military Tribunal itself-to investigate violations of humanitarian law in the former territory of Yugoslavia. The relevant Council resolution referred specifically to 'Crimes against Humanity', one of the key elements of the Nuremberg judgements, which have become known as the 'Nuremberg Principles'. These had been affirmed as a valid part of international law by the United Nations in 1946; and also included the legal principle of the responsibility of individuals to observe international law, the inadmissibility of accepting unlawful orders from superiors and the concept of crimes against peace. Taken together, the 1946 affirmation of the legal validity of the entire Nuremberg process and the specific 1993 invocation of Nuremberg in the creation of its first successor tribunal represented an endorsement at the highest international level of the fundamental legality that lay behind the Tribunal's workings and principles. The 'Nuremberg Precedent' is more alive today than it has ever been.¹⁴

Since June 1996, the International Criminal Tribunal for the Former Yugoslavia has been arresting Persons Indicted for War Crimes and bringing them to trial in The Hague. Most notable was the arrest and trial commencing February 12, 2002 of the former President of the former Yugoslavia, Slobodan Milosevic and the July 21, 2008 arrest in Belgrade of Bosnian Serb leader Radovan Karadzic. In August 2001, the Tribunal established a national hierarchy of crime defining the Serb commanders in Bosnia-Herzegovina as responsible for genocide, the Croats for crimes against humanity and the Bosnian-Muslims for breaches of the Geneva Conventions. Of the Tusa's three prerequisites for a 'future Nuremberg', the first, 'the accused must be present during the trial', is being met. However, efforts to arrest the indicted Bosnian Serb leader General Ratko Mladic remains problematic. The second prerequisite, 'the trial must be based on solid evidence', and the third, 'the procedures and the conduct of the court and trial must be above reproach in impartiality, patience, and maintenance of dignity and judicial propriety' have all the appearances of being met. Had Milosevic lived long enough to be tried, there would have been sufficient scepticism by some jurists concerning prerequisites two and three.¹⁵

Conclusion

This article has explored the question, 'When should an officer disobey orders?' and, in so doing, has examined the evolution of natural to positivistic law, the evolution and development of international law and the constraints on the waging of war, the responsibility of the state and the individual to include coercion and superior orders, democracy and conscience, and, the precedent of Nuremberg. In conclusion,

Soldiers are judged twice. They are judged based on the compatibility of their actions with the common good of their unit or nation; this is an assessment of how well they perform their duties inherent in their role as combatant; but also, and even more importantly, they are judged based on the compatibility of their actions with universal moral truths. Thus soldiers have a moral responsibility to disobey orders - even legal orders - when they prescribe immoral acts.¹⁶

The evolution of the principles of just war and legal precedent provide sufficient legal and moral protection for an officer to determine when to disobey or obey an order. ♦

The views expressed are those of the author and do not necessarily reflect the views of the Institute or its members

Endnotes

- 1 Hilaire McCoubrey and Nigel White, "International Law and Armed Conflict"
- 2 *Ibid*
- 3 JL Carney, "Is It Ever Moral to Push the Button?"
- 4 Ann and John Tusa, "The Nuremberg Trial"
- 5 *Ibid*
- 6 Michael Walzer, "Just and Unjust Wars"
- 7 Paul Christopher, "The Ethics of War and Peace"
- 8 *Ibid*
- 9 *Ibid*
- 10 *Ibid*
- 11 *Ibid*
- 12 *Ibid*
- 13 *Ibid*
- 14 Ann and John Tusa
- 15 Edward Greenspan, "This is a lynching," *The National Post*, March 13, 2002
- 16 Christopher, *op. cit.*

WHERE HAVE ALL THE MANEUVERISTS GONE?

by Vincent Curtis

“Maneuverist approach in campaign design and execution remains relevant and effective as a counter-insurgency strategy at the operational level in contemporary operations.”

—S. P. Meyer

Introduction

Since the overthrow of the Saddam Hussein regime in 2003 the opportunities for the use of Maneuver Warfare seem to have disappeared. Military literature has fallen quiet on the Maneuver Warfare front. The insurgencies first in Iraq and then in Afghanistan seem to offer no opportunity for operational maneuver, fast tempo of operations, or a *schwerpunkt*. Nevertheless, committed maneuverists hold firm in their faith that the ideas of Maneuver Warfare are just as applicable to an insurgency as to conventional conflict. This faith is held in the face of current doctrine in counterterrorism and counterinsurgency, which appear to have little of the concepts of Maneuver Warfare in them.

Maneuver Warfare is in eclipse because of irrelevancy, and the Canadian Forces not long ago adopted Maneuver Warfare as its operational doctrine.

Now that passions have cooled and new light is being shed on the future of warfighting, it is worthwhile to review and critique Maneuver Warfare. I believe that Maneuver Warfare exhibits all the worst characteristics that military theorizing has evinced in the last thirty years. A form of Idealism, Maneuver Warfare lives in its own world. No one can say precisely what Maneuver Warfare is (some experts say it is a state of mind), but as a philosophy it is hopeless. That said, it is worthwhile to explain why it is hopeless so that future doctrine and other military theories can be better grounded in right reason.

This critique of Maneuver Warfare will begin with its basic philosophical outlook and explain why that outlook is appealing, but false. The origins of Maneuver Warfare theory will be reviewed, and it will be shown that no such general theory of warfighting could have been derived without ignoring a lot of contraindicating history. Finally, turning to the problem of Afghanistan, a deliberation upon the Centre of Gravity concept will be used to point towards a possible solution, not as a means of validating Maneuver Warfare, but to establish that concepts associated with Maneuver Warfare, such as Mission Command, stand on their own and are not proprietary to it.

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Idealism: The Basic Outlook of Maneuver Warfare

Philosophical Idealism emerged in the 18th Century, and continued into the 20th. While there are many different species of Idealism, all of them hold that ideas are more important than reality. While discredited as an overt philosophy, Idealism remains an underlying philosophical outlook in many belief systems because these systems are expounded in a way that superficially resembles science.

There are countless examples of beliefs founded in Idealism in the everyday world, both in and out of the military. Everyday examples include credentialism, “technical analysis” of stock pricing, the current fear of global warming, and even the belief that no one should use a cell phone while driving. Credentialism holds that the credential is more important than actual performance of the job. Technical analysis holds that it can forecast the future price of a stock based on the shape of the curve of price as a function of time, as if the performance of the underlying company had nothing to do with it. Global warming believers persist in their alarmism despite the fact that global temperatures have not increased since 1997. Banning the use of cell phones while driving is being advanced despite the fact that using a cell phone while driving is done millions of times a day and is almost never the cause of an accident. In each example, the idea is more important than the reality.

Maneuver Warfare is a belief system or world view that has Idealism as an underlying philosophical perspective.

Realism, in contrast, is the philosophical belief that there exists a world outside of ourselves, independent of whether we think about it or not, and is what it is regardless of what we think about it. It is a common sense philosophical view that has been held since the ancient Greeks. But for the invention of Idealism, Realism as a philosophical perspective would not have a name.

Idealism and Realism meet in mathematics and the hard sciences, physics and chemistry. It is the union of these in the hard sciences that explains the persistence of Idealism as a philosophical view. The laws of physics are idealized representations of the real world that, because of the nature of the physical world, are always true. That in science, ideas of our minds - these physical laws which we discovered or created - actually and always correspond to what we perceive occurring in the real world lends credence to Idealism.

How many times have we heard it said that the moon orbits the earth because of the law of gravity? The cause-effect relationship made in this statement betrays an Idealist perspective. It is gravity, not the law of gravity, that causes the moon to orbit the earth. “Gravity” is an intellectual construct of our minds that, since Newton, we have posited to explain

the motion of physical objects that we can perceive with our senses. Gravity itself is not a perceptible object. We cannot see it, hear it, taste it, smell it, or feel it. We infer its existence, as we infer the existence of atoms and electrons, because the intellectual construct of gravity is able to explain what we are able to perceive with our senses. The law of gravity is a construction founded upon the positing of the existence of gravity, and that law forecasts precisely the behavior of any two objects subject to the gravity of each other.

That the moon and the planets moved with a periodicity proportional to the inverse square of distance was known before Sir Isaac Newton began his great work. What Newton did was create a philosophical framework out of which his “laws of motion” were logically derived and from which the periodicity of planetary and lunar movement could be explained, understood, and predicted. “I lay down the law, and derive the phenomenon from it,” he wrote. This approach became the basis of scientific method. After Newton came the philosophical Idealists who consciously aped his method because it made their work appear more intellectually respectable.

Idealist systems begin by laying down a few unchallengeable premises, in the manner of dogmatic theology and Euclidean geometry. They proceed in an ostentatiously deductive manner to demonstrate a conclusion, and the order and relationship of the exposition impart the systematic character. The result is a rationalistic monolithic structure that offers no alternatives except wholesale acceptance or rejection. An intellectual system constitutes a world of its own and has no commerce or conversation with anything outside itself.¹

No one can read Robert Leonhard’s *The Art of Maneuver* without being overwhelmed by the relentless, unjustified, and undefended positing of a world, a world in which Maneuver Warfare can thrive.² Having posited a world, Leonhard posits (where he could derive) the properties and characteristics of Maneuver Warfare, with charts, graphs, figures, and equations: weapons which resemble those of modern science. Insofar as the world posited by Leonhard and other maneuverists resembles the real world, Maneuver Warfare theory *may* have some limited validity. When the Idea becomes more important than reality, that is when maneuverists offer solutions to problems outside their domain, maneuverists are bound to be in error.

Aristotle wrote that science is both a measure of nature and is measured by it. If nature did not exhibit regular behaviour, “laws of physics” could not exist because regularity is necessary for law-like action. And Newton’s work would never have become famous if its laws and the positing of the existence of gravity failed to precisely forecast the observed behaviour of the real world. Nevertheless, it is easy to slip from speaking of science as in imperfect explanation and a forecasting of the behaviour of the real world to an imposition of the human mind on the behaviour of the real world. Science describes, it doesn’t prescribe.

The hard sciences are hard because they concern the parts of the real world that exhibit the regularity of law-like action. But the real world also includes parts where regularity does not obtain, and where the discipline of measurement and confirmatory observations is not readily available. Soft sciences and military theory are places where Idealism is able to run rampant, and the sign of Idealism is an ostentatious show of what appears to be scientific method.

We label a belief system as an Ideology, a belief system which is maintained in spite of contrary facts; and a person as an ideologue who upholds unreasonably the premises of an Ideology in the face of discrediting evidence, that is reality.

The OODA Loop

John Boyd is the father of the Maneuver Warfare school of military theory. That theory holds that maneuver is the solution to every military problem, and every military problem reduces to the discovery of the maneuver that leads to victory. Something so absolute in as complex a subject as warfare is a sign of an Ideology.

Maneuverists speak of the Soviet Marshal Mikhail Tukachevshy who, in the late 1920s and early 1930s, wrote of “deep battle” as a pioneering Maneuverist, and hold that the German example of blitzkrieg is a modern example of the technique of maneuver warfare. However, it is Boyd who first codified a theory of warfighting based on what he called the OODA loop. OODA stands for Observe-Orient-Decide-Act. Boyd, in other words, is the father of the Ideology that is called Maneuver Warfare, and the Ideology begins in an ostentatiously scientific manner with the laying down of an irrefutable premise: the real existence of the OODA loop. Maneuver Warfare is the logical consequence of the OODA loop.

Boyd formulated the OODA loop in the cockpit of his F-86 fighter jet during the course of the Korean War. He sought to explain why he could win air combats against Russian jets that, on paper, could out-perform his F-86. He determined that the power controls of the F-86 made it easier for him to maneuver his aircraft against pilots having to work the manual controls of the MiG-15. Boyd observed that when the pilot of the MiG discovered that he was being out-maneuvered in the air, he would often break in panic and try to escape, making it easier for Boyd to shoot him down.³

Boyd reasoned that if a commander got inside the OODA loop of his enemy, the faster reacting army would win, out-maneuvering the slower reacting enemy. In fact, as the out-maneuvered enemy realized that they were being out-maneuvered they would be inclined to break in panic, leading to a catastrophic collapse of resistance. Out of these concepts flowed an over-arching intellectual structure that explained the success of blitzkrieg, “deep maneuver,” the existence of an operational level of war, and much else.

The ancient Greeks were way ahead of us in the world of ideas. Boyd’s OODA loop corresponds to the way in which the ancient Greeks believed human beings thought and acted.

The act of recognition corresponds to the OO of the OODA loop. Recognition consists of two acts: perception and apprehension. First, a sentry perceives a lump in the middle of a barren field. Then he apprehends that the lump he perceives is not a bush, but a sniper in camouflage. Perception is a function of our senses, and apprehension is an involuntary act of judgment on our part. Having recognized something, we may decide to do something about it. The sentry, in our case, may decide to level his rifle at the lump he apprehends to be a sniper and shoot it, or he may decide to radio in a contact report. In either case, he decides and acts.

On the other hand, he may freeze in fear and simply stare, or he may act as if the sniper is someone else's problem and brew a cup of coffee instead. The Greeks held that one is philosophically committed to act in accordance with one's knowledge and beliefs, but we know that human beings do not always so act, as Boyd observed with the panicking MiG pilots, and in the case of the ethics expert who does not act ethically.

The OODA loop, considered as a proffered law of war, is simply a fact of human behavior, known since the ancient Greeks, dressed-up to look like a new discovery. But because the OODA loop and its consequences are proffered as a law concerning the conduct of human beings, and human beings do not exhibit the regularity necessary for a law of conduct to hold, the OODA loop law is bound to fail when humans do not act in the manner expected, that is, panic when out-manuevered.

The OODA loop theory, for all the ostentation, is not science. Maneuver Warfare is a sweeping together of selected facts and particular ideas already known and posits the proposition that maneuver is the solution to all military problems. Maneuver Warfare would have been given the short shrift had theorists looked at a few campaigns other than those cited by the committed ideologues. I call the end product of the tendentious selection of the evidence of history "synthetic experience."

Maneuverists contrast their method with what they call "attrition." Attrition is said to be the method of General Ulysses S. Grant. Maneuverists accuse Grant of employing it during his Overland Campaign of 1864-65, which saw the defeat of the Confederacy in the American Civil War. Attrition is an expensive way of winning, they hold, costing the lives of many friendly soldiers; while maneuver offers a way of victory cheaper in lives than attrition because maneuver leads to a rapid and catastrophic collapse of enemy resistance. All one has to do is out-manuever the enemy on an operational level and operate inside his OODA loop. Its superiority in cost over its supposed alternative "attrition" is the main selling point of Maneuver Warfare.

I shall defend Gen Grant from the canard of attritionist on another occasion, but a review of the facts of the Overland Campaign sheds unflattering light on the OODA loop theory and its consequent, Maneuver Warfare.

The Overland Campaign began on May 4, 1864, when the Army of the Potomac crossed the Rapidan River and entered the area of Northern Virginia called the Wilderness. The Army of Northern Virginia, under the command of CS General Robert E. Lee, moved immediately and aggressively to counter the advance of the Union column in an effort to inflict a defeat on it and force it to withdraw. Major battles were fought at the Wilderness and Spotsylvania. Of the campaign, Grant reported to Secretary of War E.M. Stanton that he determined to defeat the Confederacy "by mere attrition, if in no other way."⁴

A study of the campaign shows that Lee operated inside Grant's OODA loop consistently and throughout. The Union army was nearly defeated at the Wilderness because Lee attacked it aggressively in the flank, and nearly turned both ends of the Union line at different times of the battle. After three days of battle in the Wilderness, the Union soldiers expected Grant to withdraw, and were pleasantly surprised to discover that Grant was moving them south, not north.

Lee again beat Grant to the punch, establishing a defensive position at Spotsylvania before Grant got there. Grant, deprived of cavalry and capable only of reconnaissance by battle, fought Lee savagely, testing both his flanks as well as the centre of Lee's position. Lee was always able to maneuver forces in time to counter Grant's moves. After two weeks of battle, Grant simply moved further south, to the North Anna River. Eventually, the Army of the Potomac moved far enough south that it would invest Richmond and Petersburg. During the siege of Richmond and Petersburg Grant applied pressure up and down the Lee's line and tried to turn both flanks in an effort to force a breakthrough. Lee was able to counter every threat because he operated on interior lines, and interior lines enable a commander to Act quicker than his opponent. Lee was even able to shake loose a corps under the command of Jubal Early, which moved down the Shenandoah Valley and threatened Washington, then practically undefended.

In the end, Lee was forced to abandon Richmond and Petersburg for lack of supplies. He broke for Lynchburg, but he was caught with his rapidly diminishing army at Appomattox Court House and obliged to surrender.

OODA loops and Maneuver Warfare theory are completely unable to explain the success of Grant's campaign. Lee being a maneuverist, and the Grant the quintessential attritionist, Lee ought to have been victorious. Lee operated on interior lines, enabling him to Act at least as fast as Grant, and Lee was quite prepared to take enormous risks in order to execute encircling maneuvers in battle, as Chancellorsville dramatically attests. Grant absorbed losses that pinned the canard of attritionist upon him. Yet, it was Grant the attritionist who executed the operational maneuvers against Lee in Virginia, and grand strategically against the Confederacy through the campaign of William Tecumseh Sherman in Alabama, Georgia, and the Carolinas, and that of Philip Sheridan in the Shenandoah Valley.

A Maneuverist would argue that Grant possessed a larger army, was better supplied, and therefore was bound to win. I would add that Grant also possessed a magical wisp called “the initiative.” None of these conditions excuses the failure of Maneuver Warfare theory to forecast Grant’s victory. It would have to say that Grant was both an attritionist and a maneuverist. What brings about victory must be something more than maneuver. How Maneuver Warfare theory got as far as it did, since it calls attention to the failures of Gen. U.S. Grant, is a wonder of selective observation.

Part of the attraction of Maneuver Warfare is that it holds forth the promise that smaller forces can defeat larger ones through clever maneuver. Consequently, it cannot take into account disparities of forces, nor does it take into account limitations of logistics, initiative, morale, and many other factors that bear on victory. It seems to work best when one is able simply to tactically overpower an opponent with superior equipment, firepower, speed, and training, as occurred in both Gulf wars against Iraq. Implicitly, it applies only to wars one might call “napoleonic.” Since it is concerned with the operational maneuver of divisions, corps, and armies, it offers no apparent view towards the handling of guerrilla wars or insurgencies, which have nothing against which divisions and corps can maneuver.

Maneuver Warfare is a species of Idealism, and like other idealist theories they work great until they don’t. Since we have to accept or reject Maneuver Warfare wholesale, its failure requires us to reject it, as we would reject Newton’s theory if it did not work.

The remainder of this article will be concerned with extracting what is useful from the wreckage of Maneuver Warfare theory, and applying it to the war we face presently: the insurgency in Afghanistan and the terrorism of al Qaeda.

Picking through the Wreckage: The “Maneuverist” Approach

When one wishes to compare two different species of the same genus, one can only do so in respect of qualities that they share generically. If ‘napoleonic’ and ‘guerilla’ name species of the genus warfighting, and the ‘maneuverist approach’ belongs to the ‘napoleonic’ species, then in trying to apply the ‘maneuverist approach’ to guerilla warfare one can only do so in respect of those elements that ‘napoleonic’ and ‘guerilla’ warfare have in common, that is at the level of the genus. Thus whatever it is in the maneuverist approach that applies to guerilla warfare it is something that belongs to the genus warfighting, not specifically to ‘napoleonic’ warfare, and therefore cannot be proprietary to Maneuver Warfare.

Whatever we discover in the wreckage of Maneuver Warfare that is applicable to fighting an insurgency is in no way an endorsement or verification therefore of the so-called maneuverist approach. To hold that the maneuverist approach is applicable to guerilla warfare is as sensible as saying that the guerilla warfare approach is an appropriate manner of fighting a Napoleonic-scale battle! Maneuver Warfare is a

sweeping together of things already known, along with the positing of a proposition. Only the defining proposition is proprietary to Maneuver Warfare. The other attributes swept together belong to the genus warfighting or to the species Napoleonic warfare.

Mission command is falsely said to be an essential attribute of Maneuver Warfare. In fact, Mission Command is a policy of management, and management policy and warfighting belong to different genera. They are completely different things. Mission command (or ‘auftragstaktik’) is the policy of requiring subordinates to make their own decisions in respect of areas of their competence and giving them the latitude to do so. This policy and style of leadership are as applicable to corporations as it is to military commands. (The operations of Al Qaeda show the effectiveness of Commander’s Intent, and AQ is a terrorist organization!) Mission command is an accidental attribute of Maneuver Warfare because some management policy or other is necessary to the management of a large army. Swans have to be some color or other, so whether a swan is white or black constitutes an accidental attribute of swans. It is possible to exercise Mission Command outside the realm of Maneuver Warfare, as it is possible for birds other than swans to be black or white.

As black is the contrary of white, the contrary of Mission Command is Orders Command or ‘befehlstaktik.’ It is also a style of leadership allowed under Maneuver Warfare and is one in which tight control is maintained over subordinate leadership. The Soviets employed Befehlstaktik, and one can make a good case that Napoleon did also. There is nothing apparent in the leadership style, in the manner of control, in which military operations are conducted that sheds light on how an insurgency ought to be combated successfully.

Similarly, one can go through the rest of the main elements of Maneuver Warfare and find little that commends itself: tempo of operations, schwerpunkt, surprise, combined arms, flexibility, focus of effort. Each of these pickings might be useful in a particular engagement with a guerilla band, but to the overall problem of insurgency nothing in the component wreckage of Maneuver Warfare suggests itself as key to an operational method of planning and executing a campaign against an insurgency.

Insurgency and the Centre of Gravity Concept

In a previous paper it was shown that military theory as an intellectual discipline resembles ethics rather than physics.⁵ Ethics requires the use of the calculative faculty of the mind rather than the scientific because, in contrast to those of physics, rules of right conduct in ethics do not always hold. In life, one is bound to make ethical choices, and one relies on one’s experience and careful deliberation in order to make the prudent choice in singular circumstances. In exact analogy, the same is true of military theory and military problems. Below is an example of deliberation upon the problem of Afghanistan, against which one may contrast the application

of the synthetic experience of maneuver warfare.

Let us recur to the genus of warfighting. In his theory of war, Clausewitz posited the existence of a centre of gravity in each belligerent. Drawing from the example of the centroid of a physical body, Clausewitz posited that the overthrow of the enemy's centre of gravity would result in his collapse just as pushing the centroid of a physical body beyond the limits of its base would result in the collapse of the whole body.

History gives us several examples of centres of gravity: Paris to France, Baghdad to Iraq, and the Army of Northern Virginia to the Confederacy. What could be the centre of gravity of an insurgency? One centre of gravity in an insurgency is easy to find: the capital city of the incumbency. When the insurgents capture the capital of the incumbent regime, the insurgency is almost invariably over. The matter is not so simple and easy in respect of the centre of gravity of the insurgent.

History shows that a particular place is not always the centre of gravity of an insurgency, though insurgencies require a safe haven as a base. Likewise, a particular military force is rarely the centre of gravity of an insurgency, though destroying military forces of an insurgency is a means of gaining time for the incumbency. The same holds true for person: the war in South Vietnam, for example, survived the death of Ho Chi Minh.

If a person, place, or thing is not the centre of gravity of an insurgency, what could be? An answer that fits the description of not being a person, place, or thing, that nevertheless exists and is capable of being destroyed is an Idea, specifically a political idea. *If* an Idea is the centre of gravity of the insurgency in Afghanistan, what could that Idea be?

Two Ideas suggest themselves: one is Pashtun nationalism, the other is religious righteousness. The political aspect of religious righteousness lies in the establishment of a polity in which religious righteousness reigns. The Islamic Caliphate is an example of a polity in which religious righteousness was ostensibly allowed to reign. Righteousness is the justification the Taliban offer for their insurgency, while nationalism may be an Idea that underlies Islamic righteousness.

If religious righteousness is the centre of gravity of the insurgency in Afghanistan, what force can be applied to overthrow it? Only in practically unique circumstances, such as a trial by battle in which God sides with the winner, can military force overthrow an Idea of religious righteousness. An Idea has to be combated, offensively, by another Idea. And Ideas of that sort lie in the realm of politics. It has to be an idea specific to the Insurgency in Afghanistan. What could it be?

David Kilcullen in his book *The Accidental Guerilla* pointed out that by Islamic standards, the Taliban are not *jihidi* but rather *takfiri*.⁶ To Muslim eyes, a *jihidi* is a person engaged in an honorable pursuit. *Takfir* is a heresy to both Sunni and Shia Islam because it violates the stricture in the Koran that "there is no compulsion in religion." *Takfir* is the proposition that other Muslims have to follow the religious practices and interpretation of Sharia law of a particular person, or else that

person has the right to kill the other Muslims on the grounds that they are apostates, not true Muslims. It is one thing to kill Christians, Jews, and people "not of the book," but to kill fellow Muslims is looked down upon in Islam. The Taliban are plainly *takfiri*, not *jihadi*, because they impose their particular views of Islam and Sharia Law upon other Muslims under the pain of death or dismemberment. Being considered *takfiri*, rather than *jihadi*, ought to undercut the claim of and the appeal to religious righteousness from the Taliban.

If the Taliban were seen as mere thugs and brigands who had nothing to justify their violence, and acted solely for their own personal benefit, whatever appeal the cause of the Taliban has in Afghanistan ought to wither. Precisely how that Idea, the idea of the Taliban as dishonorable *takfiri*, not the honorable *jihidi* they claim to be, gets implanted is through a political campaign in which a military force can act as disseminators of information.

On the other hand, if Pashtun nationalism is the real centre of gravity of the Taliban insurgency, it will be up to the Pashtun politicians in Kabul to seize that cause for themselves, employing both logic and emotion.

We have thus arrived through deliberation at courses of action which have nothing to do with military action at all. Nothing certainly in this deliberation points to an operational maneuver as being the basis upon which a military campaign can overthrow the centre of gravity of the Taliban. In an insurgency, political aspects take on a more dynamic role than in Napoleonic wars. Politicians and policies of the incumbency are responsible for overthrowing the centre of gravity of the insurgency - that is, *depriving the insurgency of a cause* - just as militaries are responsible for overthrowing the tangible centres of gravity of Napoleonic wars. Important as the military role is in an insurgency, it is fundamentally defensive and protective of the centre of gravity of the incumbency. The offensive against an insurgency occurs at the political level, and is conducted by politicians. (Further reflection will show that depriving the opposition of a cause is the basis of any kind of competitive political campaign. This insight is interesting because it supports the dictum that war is the continuation of politics by other means.)

Insofar as there is a similarity between the operational maneuver of an army in a military campaign and a political maneuver by a politician in a political campaign, this similarity is generic in nature. The two are comparable generically, not specifically. It is as sensible to say of a political maneuver that it is similar to a military maneuver, as it is to say that a military maneuver is similar to a political maneuver. These are generic comparisons, not specific ones.

Because deliberation led to a political rather than a military course of action we ought to be reassured as to the general utility of deliberation over ideological prescription making. The generalization called Maneuver Warfare is synthetic experience. Pushed to an extreme, it becomes an ideology, and an ideology is limited to the world it inhabits.

Deliberation for the purpose of making a prudent choice surveys the whole of experience and selects that which is true in each school of thought.

Conclusion

The aim of this paper was to review the precepts and basis of Maneuver Warfare in view of its current eclipse. The cause of that eclipse is that Maneuver Warfare offers no insights into gaining victory over the insurgency in Afghanistan. Maneuver Warfare was shown to be a species of Idealism, a method which seems to work in the world posited by its adherents. When that world does not obtain, as it does not obtain in Afghanistan, Maneuver Warfare ought not to thrive, as it does not thrive. Maneuver Warfare was not based upon any new insights nor was it validated by a thorough review of history, as was shown by the analysis of the OODA loop and Grant's Overland campaign. That Maneuver Warfare is a species of Idealism, an Ideology, is demonstrated by the manner of its exposition and by fact that committed maneuverists in the face of contrary evidence cling to the belief that elements of Maneuver Warfare are applicable to Insurgency. We have shown that those elements that are applicable to the

insurgency in Afghanistan are not proprietary to Maneuver Warfare, and whatever their application to Afghanistan may be it offers no validation of the theory of Maneuver Warfare. Finally, a deliberation on the centre of gravity of the insurgency in Afghanistan shows how reason can be used to infer a fresh direction that offers the possibility of final victory over the Taliban. ♣

The views expressed are those of the author and do not necessarily reflect the views of the Institute or its members

Notes

- 1 Mortimer J. Adler *The Four Dimensions of Philosophy* Maxwell-MacMillan Canada, 1993, pp 244ff.
- 2 Robert Leonhard *The Art of Maneuver* Presidio, 1991.
- 3 William S. Lind *Maneuver Warfare Handbook* Westview Press, 1985.
- 4 U.S. Grant *Memoirs* Dover Publications, 1995, p 463.
- 5 Vincent J. Curtis "The Essential Questions of Military Theory" *Sitrep* Vol 69, No. 1, p 9.
- 6 David Kilcullen *The Accidental Guerilla* Oxford University Press, 2009.



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